WHAT IS CLAIMED IS:

1. A sensor device for non-invasively measuring a blood oxygen level of a patient, the device comprising:

a first device portion;

a second device portion pivotally connected to the first device portion to define a clamping end of the device;

a sensing mechanism in communication with the clamping end of the device for sensing at least one parameter utilized to determine the blood oxygen level of a patient; and

a resilient member disposed between the device portions for biasing the device portions toward each other at the clamping end of the device for clamping an appendage of the patient therebetween, the resilient member further providing a cushion for the appendage at the clamping end of the device.

2. The device according to claim 1, wherein the resilient member further comprises:

a bias portion distally disposed from the clamping end of the device; and

a cushion portion proximally disposed to the clamping end of the device.

3. The device according to claim 1, wherein the resilient member comprises:

a first cushion portion in communication with the first device portion at the clamping end of the device;

a second cushion portion in communication with the second device portion at the clamping end of the device; and

a bias portion in communication with both device portions proximate the pivotal connection therebetween.

4. The device according to claim 1, wherein the resilient member comprises an elastomeric material.

5. The device according to claim 1, wherein the resilient member is made from a material selected from the group consisting essentially of liquid silicon rubber, thermoplastic elastomers, polyolefin elastomers, thermoplastic rubbers, natural rubbers, and urethanes.

6. The device according to claim 1, wherein one of the device portions includes at least one track and the other of the device portions includes at least one pin disposed within the track to guide movement of the device portions in relation to each other.

7. A sensor device for non-invasively measuring a blood oxygen level of a patient, the device comprising:

a first device portion;

a second device portion pivotally connected to the first device portion to define a clamping end of the device and an actuation end of the device;

a sensing mechanism in communication with the clamping end of the device for sensing at least one parameter utilized to determine the blood oxygen level of a patient; and

a resilient member having a cushion portion disposed between the device portions proximate the clamping end of the device and a bias portion disposed between the device to bias the device portions toward each other at the clamping end of the device.

8. The device of claim 7, wherein the cushion portion comprises a first cushion portion in communication with the first device portion and a second cushion portion in communication with the second device portion.

9. The device according to claim 7, wherein the resilient member comprises an elastomeric material.

10. The device according to claim 7, wherein the resilient member is made from a material selected from the group consisting essentially of liquid silicon rubber, thermoplastic elastomers, polyolefin elastomers, thermoplastic rubbers, natural rubbers, and urethanes.

11. The device according to claim 7, wherein one of the device portions includes at least one track and the other of the device portions includes at least one pin disposed within the track to guide movement of the device portions in relation to each other.

12. A resilient member for use with a clip-type sensor, the member comprising:

a bias portion that fits between a first portion and a second portion of the clip-type sensor to bias the portions into a clamped position; and

a cushion portion integrally formed with the bias portion that fits between the first portion and the second portion of the clip-type sensor to cushion a finger clamped by the sensor.

13. The resilient member according to claim 12, wherein the cushion portion further comprises a first cushion portion and a second cushion portion divergently opposed to each other.

14. The resilient member according to claim 12, wherein the resilient member comprises an elastomeric material.

15. The resilient member according to claim 12, wherein the resilient material is selected from the group consisting essentially of liquid silicon rubber, thermoplastic elastomers, polyolefin elastomers, thermoplastic rubbers, natural rubbers, and urethanes.